UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2654	6

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/897,805	HIGINBOTHAM, DAN
	Examiner	Art Unit
	Thomas E Shortledge	2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/12/2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings of figure 5 are objected to as failing to comply with 37 CFR

1.84(p)(5) because they include the following reference sign(s) not mentioned in the

description: 70, and 74. A proposed drawing correction, corrected drawings, or

amendment to the specification to add the reference sign(s) in the description, are

required in reply to the Office action to avoid abandonment of the application. The

objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the
> prior art are such that the subject matter as a whole would have been obvious at the time the invention
> was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating
        obviousness or nonobviousness.

3.   Claims 1-2, 8, and 10 –16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Adachi et al (U.S. Patent 4,866,670).

A to claims 1 and 8 Adachi et al. teach:

A computerized workstation with a workbench program therefor (machine

translation processor embodying the present invention, Fig 1, element 10, and col.2,

lines 61-61);

A partial translation memory (translation memory unit, Fig. 1, element 25, col. 3,

lines 12 – 14);

comprised of computer readable-code (inherent in processor);

allowing a user to determine at a single glance (when the partial translation is

displayed in the translated sentence display region, the user can readily judge that the

displayed sentence is not a bona fide translated sentence, col. 4 lines 20-25);

partial sentences within the input text have been previously translated by

comparing said partial sentences with a database of previously – translated material

(phrases are sent to the translation unit, a knowledge data base and a translation

memory unit connected to the translation unit, col. 3 line 59, and fig. 1 elements 18, 16

and 25).

Adachi et al. does not explicitly teach writable text data software application

program chosen from a list containing spreadsheet and word-processing software.

However, it would have been obvious to one of ordinary skill in the art at the time

of invention to use word-processing or spreadsheet software to input text to the system,

to allow for increased flexibility (Adachi et al, col. 6, lines 35-37)

As to claim 2, Adachi et al. teach a database of previously translated material

(translation memory unit for storing translated sentence, col. 3, lines 12-14).

As to claim 10, Adachi et al teach:

executing a workbench program on a computer system, (translation processing

containing a translation unit, col. 2, line 63 and col. 3, line 2, Fig. 1, elements 10, and

18);

text data comprising at least one text segment, (English sentence that is give via

the input unit, col. 2, line 68 through col. 3 line 1);

partial sentence translation memory interfacing with said workbench program and

said writable application program, (translation memory unit, translation unit, and input

unit connected through the edition control unit, col. 3 lines 2 – 15, Fig. 1, elements 25,

18, 12, and 32 respectfully);

comparing said text segment with a database containing previously translated

material, (construction and meaning are analyzed by the use of the translation

dictionary and the translation grammar that are stored in the knowledge data base, col.

5, lines 49-51);

displaying said partial sentence translations, (the original sentence and the

translated sentence are displayed, col. 4, lines 1-2).

Adachi et al. does not teach a writeable text data application program capable of interfacing with said workbench program.

However, it would have been obvious to one of ordinary skill in the art to use a writable text data application program to supply the input to the translation unit to allow for increased flexibility (Adachi et al, col. 6, lines 35-37)

As to claim 11, Adachi et al. teach database of previously translated material is contained within said workbench program, (knowledge database contained in translation unit, Fig. 1, elements 16, and 18).

As to claim 12, Adachi et al. teach database of previously translated material is contained within said partial sentence translation memory, (a translation memory unit for storing translated sentence, col. 3, lines 20-22).

4.   Claims 3 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. as applied to claim 1 listed in the above paragraph in view of Hargrave et al. (6,131,082).

As to claim 3, Adachi does not teach partial sentence translation memory utilizes said database contained therein to determine whether said partial sentences have been previously translated.

However, Hargrave teaches the retriever uses the translation memory to quickly find all text segments in aligned pair file similar to the text of a query segment, (col. 13, lines 18-20).

As to claim 4, Adachi et al. teach partial sentence translation memory utilize said

database contained within said workbench program to determine whether said partial

sentences have been previously translated, (a knowledge data base, translation unit,

col. 3 lines 2-3 and Fig. 1, and 18).

As to claim 5, Adachi et al. does not teach of the method to determine which

partial sentences within said text segment have been previously translated by

comparing said partial sentences with said database.

However, Hargrave et al. teach the heart of the Translation Memory is an

"aligned file" comprising a source language file that is broken into a plurality of text

segments. Each source language text segment is associated or aligned with a

translated text segment in a target language, (col. 5, lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of invention to combine the translation machine of Adachi et al. with the translation

process of Hargrave et al. because Hargrave et al. teach, when aligned text segments

are searched, translated text segments are produced (col. 5, lines 21-22).

As to claim 6, Adachi et al. do not teach that the partial sentence translation

memory ignores punctuation and capitalization.

However, Hargrave et al. teach a source language file that is broken into a

plurality of text segments. Each text segment may be a word, group of words, phrase,

sentence or the like (col. 5, lines 12-15).

Therefore, it would be obvious to one of ordinary skill in the art at the time of the

invention to notice that as Hargrave et al. teach the above, punctuation would be

ignored since it would be irrelevant when pertaining to only a lone word or group of words.

As to claim 7, Adachi et al. does not teach text data is selected from a group consisting of words, phrases, characters, and symbols.

However, Hargrave et al. teach each text segment may be a word, group of words, phrase, sentence or the like (col. 5 lines 13-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the translation machine of Adachi et al. with the segment selection process of Hargrave et al. because Hargrave et al. teach when aligned text segments are searched, translated text segments are produced (col. 5, lines 21-22).

5.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. as applied to claim 1 listed in the above paragraph in view of Kaji et al. (5,907,821).

As to claim 9, Adachi et al. does not teach data is entered into said text data program using methods selected from the group consisting of typing, scanning, importing, FTP, and importing from a network program.

However, Kaji et al. teaches importing and FTP (input device is a disk drive unit or a CD-ROM drive or a communication control unit or a keyboard, col. 5 lines 25-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the translation process of Adachi et al. with the range of inputs available to Kai et al. to enable the translation process to be more useful.

6.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. as applied to claim 10 listed in the above paragraph in view of Dolan (6,081,775).

As to claim 17, Adachi et al. fails to teach the step of storing said partial sentence translations in a permanent database for later use.

However, Dolan teaches of a storage device, such as a hard disk drive (col. 6 line 2). Dolan also teaches of a memory preferable containing a lexical knowledge base (col. 6 lines 8-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the translation method of Adachi et al. with the permanent storage device of Dolan to increase is utility by reusing previous translations of partial sentences.

7.   Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. as applied to claim 10 listed in the above paragraph in view of Motoyama (U.S. Patent 5,848,386).

As for claim 18, Adachi et al. does not teach of a database stored on network.

However, Motoyama teaches document is saved to memory such as another computer through a network, (col. 9, lines 61-63, and Fig. 14, element 375).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the translation process of Adachi et al. with the network element of Motoyama to avoid excessive local memory requirements.

8.   Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. in view of Hargrave et al. (6,131,082).

As to claim 19, Adachi et al teach:

A computer readable medium containing instructions to direct a computer, (machine translation processor, instructions are inherent to the processor, col. 2, line 61),

Workbench application program stored and executable on a computer system, comprising at least one database of previously translated material (translation unit, col. 3, line 2, Fig. 1, elements 18, and 16),

Adachi et al. does not teach the purpose of identifying, within said text segment, any previously translated sentences determined by comparing said text segment with said database of previously translated material.

However, Hargrave et al. teach each source language text segment is associated or aligned with a translated text segment in a target language, (col.5, lines 13 – 1 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the translation machine of Adachi et al. with the text alignment process of Hargrave et al. for gains in accuracy and speed as taught by Hargrave et al. (col. 3, lines 35-36).

9.   Claims 20 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. in view of Hargrave et al., as discussed in claim 19 of the above paragraph, in further view of Morohasi et al.

As to claims 20 and 21, Adachi et al. and Hargrave et al. do not teach identifying the partial sentence comprising a first longest sentence after the previously translated text segment and therefore, the second longest sentence.

However, Morohasi et al. do teach of the principle of the longest-match (col. 9, lines 2-3), which would have suggested to one of ordinary skill in the art at the time of invention, finding the longest remaining translatable phrase not previously translated.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the translation machine of Adachi et al. and the text alignment process of Hargrave et al. with the sentence division process of Morohasi et al. for gains in efficiency in partial translation by translating the longest remaining items first.

As to claim 22, Adachi et al. teach of a partial sentence comprising a plurality of partial sentences (input is divided into elemental units of the sentence by division grammar, col. 3, lines 52-59.)

Adachi et al. does not explicitly teach each segment beginning with a different word.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to notice as Adachi et al. uses grammar to divide the input sentence into its elemental units, each of those untranslated units (phrases) would then begin with a different word.

10.   Claims 23 – 26 and 27 - 30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Adachi et al. in view Hargrave et al., and in further Morohasi et al.

As to claim 23, Adachi et al. teach:

Instructions executable by said computer (inherent in processor)

Executing a partial sentence translation memory (translation memory unit, Fig. 1,

element 25);

Interfacing said partial sentence translation memory with a workbench program,

(translation unit connected through the edition control unit to the translation memory

unit, Fig. 1, elements 18, 25, and 32),

Repeating the process until the longest partial sentence is determined (it is

judged whether or not translation is completed, col. 3, lines 67-68),

Returning said results to a graphical user interface, (the original and translated

sentences are displayed, col. 4, lines 1-2),

Adachi et al. does not explicitly teach writable text data software application

program chosen from a list containing spreadsheet and word-processing software.

However, it would have been obvious to one of ordinary skill in the art at the time

of invention to use word-processing or spreadsheet software to input text to the system,

to allow for increased flexibility (Adachi et al, col. 6, lines 35-37)

Adachi et al. fail to teach:

Plurality of text segments,

Identifying at least one of said text segments,

Identifying any partial sentences contained in said text segment that have been previously translated,

Comparing the last word in said text segment with a database of previously translated material to determine whether said last word has been previously translated,

Determining the longest partial sentence,

However, Hargrave et al. teach:

plurality of text segments (col. 5, lines 11-12),

identifying at lease one of said text segments (each source language text segment is associated or aligned with a translated text segment, col. 5, lines 14-15)

identifying any partial sentences contained in said text segment that have been previously translated (each source language txt segment is associated or aligned with a translated text segment col. 5, lines 14-15),

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the translation process of Adachi et al. with the comparison and identifying process of Hargrave et al. because Hargrave et al teaches, when aligned text segments are searched, translated text segments are produced (col. 5, lines 21-22).

Neither Adachi et al. nor Hargrave et al. teach, comparing the last word in said text segment with a database of previously translated material to determine whether said last word has been previously translated,

However, Morohasi et al. teach;

Comparing the last word in said text segment with a database of previously translated material to determine whether said last word has been previously translated (clauses are searched for with respect to the character string beginning, col. 9, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the translation processor and translation unit of Adachi et al., and the database identifying method of Hargrave et al, and with the comparison method of Morohasi et al. to provide for a more detailed analysis and division (Morohasi et al., col. 1, lines 53-54 with col. 2, lines 51-55).

As to claim 24, Adachi et al. teach storing said partial sentence translations in at leas one database for later use, (translation memory unit for storing translated sentence, col. 3, lines 12-13).

As to claim 25, Adachi et al. teach database of previously translated material is contained within said workbench program, (knowledge data base is contained within Translation unit, Fig. 1, elements 16 and 18).

As to claim 26, Adachi et al. teach database of previously translated material is contained within said partial sentence translation memory, (translation memory unit for storing translated sentence that is translation-processed, col. 3, lines 12-15).

As to claim 27, Adachi et al. teach:

instructions executable by said computer (inherent in processor)

generating text data within a writable application program (inputting an original written in a first language, col. 2, lines 14-15),

a partial sentence translation memory (translation memory unit, Fig. 1, element

25);

interfacing said partial sentence translation memory with a workbench program,

(Translation Unit connected through the Edition Control Unit to the Translation Memory

Unit, Fig. 1, elements 18, 25, and 32);

repeating the process until the longest partial sentence is determined (it is judged

whether or not translation is completed, col. 3, lines 67-68);

returning said results to a graphical user interface, (the original and translated

sentences are displayed, col. 4, lines 1-2);

Adachi et al. fail to teach:

plurality of text segments;

identifying at least one of said text segments;

identifying any partial sentences contained in said text segment that have been

previously translated;

comparing the last word in said text segment with a database of previously

translated material to determine whether said last word has been previously translated;

determining the longest partial sentence;

However, Hargrave et al. teach:

plurality of text segments (col. 5, lines 11-12),

identifying at lease one of said text segments (each source language text

segment is associated or aligned with a translated text segment, col. 5, lines 14-15)

identifying any partial sentences contained in said text segment that have been previously translated (each source language text segment is associated or aligned with a translated text segment, col. 5, lines 14-15),

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the translation process of Adachi et al. with the comparison and identifying process of Hargrave et al. because Hargrave et al teach, when aligned text segments are searched, translated text segments are produced (col. 5, lines 21-22).

Neither Adachi et al. nor Hargrave et al. teach, comparing the last word in said text segment with a database of previously translated material to determine whether said last word has been previously translated,

However, Morohasi et al. teach;

comparing the first word in said text segment with a database of previously translated material to determine whether said last word has been previously translated (clauses are searched for with respect to the character string beginning with, col. 9, lines 5-6).

Therefore It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the translation processor and translation unit of Adachi et al., the database identifying method of Hargrave et al, and with the comparison method of Morohasi et al. to provide for a more detailed analysis and division (Morohasi et al., col. 1, lines 53-54).

As to claim 28, Adachi et al. teach storing said partial sentence translations in at least one database for later use, (translation memory unit for storing translated sentence, col. 3, lines 12-13),

As to claim 29, Adachi et al. teach database of previously translated material is contained within said workbench program, (knowledge data base is contained within Translation unit, Fig. 1, elements 16 and 18),

As to claim 30, Adachi et al. teach database of previously translated material is contained within said partial sentence translation memory, (translation memory unit for storing translated sentence that is translation-processed, col. 3, lines 12-15),

11.   Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. in view of Hargrave et al.

As to claim 31, Adachi et al. teaches:

A computer readable memory medium including code (inherent in processor),

A means to identify at least a portion of text data to define a text segment (the original sentence stored is supplied via the edition control to the translation unit by being separated an sent out sentence by sentence, col. 5, lines 43-45),

A partial sentence translation memory (translation memory unit for storing translated sentence, col. 3, lines 12 –15),

A workbench program comprising at least one database of previously translated material (knowledge database contained within the translation unit, Fig. 1 elements 16, and 18),

Adachi et al does not explicitly teach a computer to receive and process text data in a writeable application program,

However, it would have been obvious to one of ordinary skill in the art at the time of invention to use word-processing or spreadsheet software to input text to the translation processor, to allow for increased flexibility (Adachi et al, col. 6, lines 35-37).

Adachi et al. does not teach of means to identify any partial sentences that have been previously translated.

However, Hargrave et al. does teach of an "aligned file" comprising, a source language file that is broken into a plurality of text segments. Each source language text segment is associated or aligned with a translated ext segment in a target language (col. 5, lines 11-15).

Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the translation processor, and translation processing means with the text segment identifying and comparisons methods taught by Hargrave et al. because Hargrave et al teaches when aligned text segments are searched, translated text segments are produced (col. 5, lines 21-22).
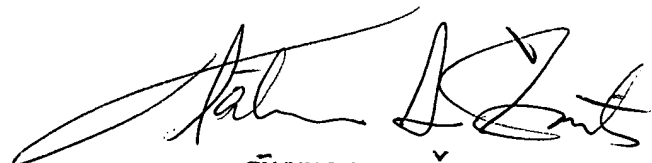
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas E Shortledge whose telephone number is (703) 605-1199. The examiner can normally be reached on M - F: 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Talivaldis Smits can be reached on (703) 306-3011. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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TS
6/8/04

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PRIMARY EXAMINER